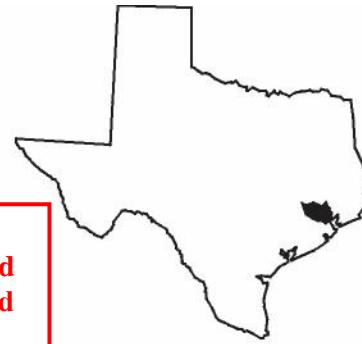


Flood Insurance Study

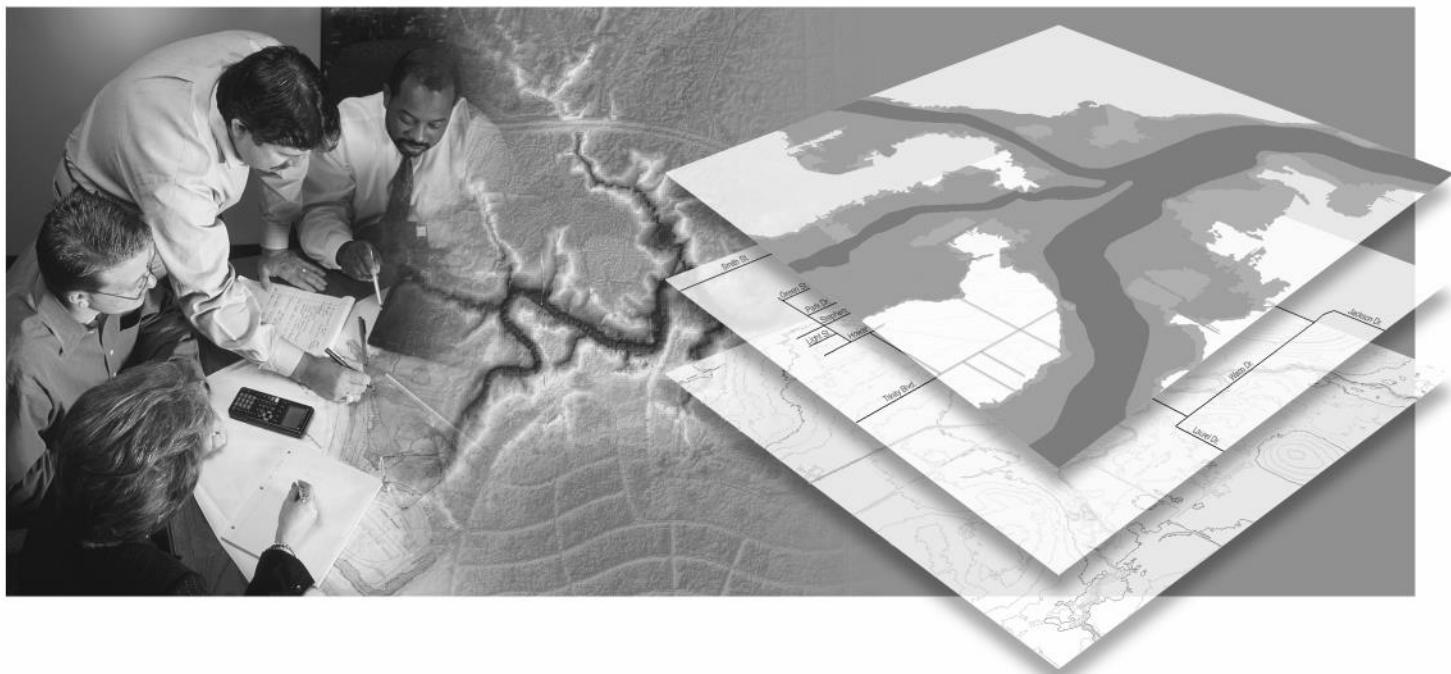
Harris County, Texas and Incorporated Areas

VOLUME 2 of 12



Notice

This preliminary FIS report includes only revised Flood Profiles and Floodway Data tables. See "Notice to Flood Insurance Users" page for additional details



COMMUNITY NAME

Baytown, City of
Bellaire, City of
Bunker Hill Village, City of ¹
Deer Park, City of
El Lago, City of
Galena Park, City of
Hedwig Village, City of¹
Hilshire Village, City of
Houston, City of
Humble, City of
Hunters Creek Village, City of
Jacinto City, City of
Jersey Village, City of
La Porte, City of
Missouri City, City of
Morgans Point, City of

COMMUNITY NO.

485456
480289
480290
480291
485466
480293
480294
480295
480296
480297
480298
480299
480300
485487
480304
480305

COMMUNITY NAME

Nassau Bay, City of
Pasadena, City of
Pearland, City of
Piney Point Village, City of
Seabrook, City of
Shoreacres, City of
South Houston, City of
Southside Place, City of
Spring Valley, City of
Stafford, City of
Taylor Lake Village, City of
Tomball, City of
Webster, City of
West University Place, City of
Harris County Unincorporated Areas

COMMUNITY NO.

485491
480307
480077
480308
485507
485510
480311
480312
480313
480233
485513
480315
485516
480318
480287

¹ No Special Flood Hazard Areas identified

REVISED:
FLOOD INSURANCE STUDY NUMBER
48201CV002D



FEMA

PRELIMINARY

January 30, 2017

NOTICE TO FLOOD INSURANCE STUDY USERS

Communities participating in the National Flood Insurance Program have established repositories of flood hazard data for floodplain management and flood insurance purposes. This Flood Insurance Study may not contain all data available within the repository. It is advisable to contact the community repository for any additional data.

Part or all of this Flood Insurance Study may be revised and republished at any time. In addition, part of this Flood Insurance Study may be revised by the Letter of Map Revision process, which does not involve republication or redistribution of the Flood Insurance Study. It is, therefore, the responsibility of the user to consult with community officials and to check the community repository to obtain the most current Flood Insurance Study components. A listing of the Community Map Repositories can be found on the Index Map.

This FIS was revised on January 6, 2017. Users should refer to Section 10.0, Revision Description, for further information. Section 10.0 is intended to present the most up-to-date information for specific portions of this FIS report. Therefore, users of this FIS report should be aware that the information presented in Section 10.0 supersedes information in Section 1.0 through 9.0 of this FIS report.

This publication incorporates revisions to the original FIS.

Initial Countywide FIS Effective Date: September 28, 1990

First Revised Countywide FIS Date: September 30, 1992 -- to update corporate limits, to change Base Flood Elevations, to update map and format and roads and road names; and to incorporate previously issued letters of map amendment.

Second Revised Countywide FIS Date: November 6, 1996 -- to update corporate limits, map format and roads and road names; to decrease Base Flood Elevations; and to incorporate previously issued letters of map amendment.

Third Revised Countywide FIS Date: April 20, 2000 -- to update corporate limits, to add Base Flood Elevations, Special Flood Hazard Areas; to change Base Flood Elevations, Special Flood Hazard Areas, and zone designations; to add road and road names; to reflect updates topographic information; and to incorporate previously issued letters of map revision, and previously issued letters of map amendment.

Fourth Revised Countywide FIS Date: June 18, 2007 -- to change Base Flood Elevations, Special Flood Hazard Areas, zone designations, and floodway; and to reflect updated topographic information.

Fifth Revised Countywide FIS Date: October 16, 2013 -- to change Base Flood Elevations, Special Flood Hazard Areas, and floodway; and to incorporate previously issued letters of map revision.

Sixth Revised Countywide FIS Date: June 9, 2014 -- to change Base Flood Elevations, Special Flood Hazard Areas, and floodway; and to incorporate previously issued letters of map revision.

Seventh Revised Countywide FIS Date: May 4, 2015 – to update corporate limits.

Eighth Revised County FIS Date: January 6, 2017 – to change Base Flood Elevations, Special Flood Hazard Areas, zone designations, and floodway; to incorporate previously issued letters of map revision; to update the effects of wave action and road and road names, and to reflect revised shoreline and updated topographic information

Ninth Revised County FIS Revision Date: _____, 2018 to update corporate limits, to change Base Flood Elevations, to change Special Flood Hazard Areas, to change zone designations, to update map format, to add roads and road names, to incorporate previously issued Letters of Map Revision, and to reflect updated topographic information.

This preliminary revised Flood Insurance Study contains only Floodway Data tables or Flood Profiles added or revised as part of the revision. All other Floodway Data tables and Flood Profiles will appear in the final FIS report.

TABLE OF CONTENTS

VOLUME 1 – _____, 2018

	<u>Page</u>
1.0 <u>INTRODUCTION</u>	1
1.1 Purpose of Study	1
1.2 Authority and Acknowledgments	2
1.3 Coordination	4
2.0 <u>AREA STUDIED</u>	4
2.1 Scope of Study	4
2.2 Community Description.....	7
2.3 Principal Flood Problems.....	27
2.4 Flood Protection Measures	29
3.0 <u>ENGINEERING METHODS</u>	31
3.1 Hydrologic Analyses.....	31
3.2 Hydraulic Analyses	97
3.3 Vertical Datum.....	111
3.4 Effects of Land Subsidence	111
3.5 Coastal Analyses.....	117
3.5.1 Storm Surge Analysis and Modeling	117
3.5.2 Statistical Analysis.....	118
3.5.3 Stillwater Elevations	119
3.5.4 Wave Height Analysis	122
3.5.5 Combined Probability Analysis	127
3.6 Light Detection and Ranging (LiDAR)	131
3.7 Base Map	133
4.0 <u>FLOODPLAIN MANAGEMENT APPLICATIONS</u>	134
4.1 Floodplain Boundaries	134
4.2 Floodways	135
5.0 <u>INSURANCE APPLICATION</u>	136
6.0 <u>FLOOD INSURANCE RATE MAP</u>	137
7.0 <u>OTHER STUDIES</u>	142
8.0 <u>LOCATION OF DATA</u>	142
9.0 <u>BIBLIOGRAPHY AND REFERENCES</u>	142

TABLE OF CONTENTS (Cont'd)

VOLUME 1 (Cont'd)

10.0	REVISION DESCRIPTIONS	146
10.1	Fifth Revision - October 16, 2013	146
10.2	Sixth Revision – June 9, 2014.....	152
10.3	Seventh Revision – May 4, 2015.....	155
10.4	Eighth Revision – January 6, 2017	155
10.5	Ninth Revision – _____, 2018	159

FIGURES

Page

Figure 1 – Vicinity Map	6
Figure 2 – Stream Network Map	20
Figure 3 – Watershed Map	23
Figure 4 – Graph of Base Flood Discharges for 15 Urban Gaging Stations	43
Figure 5 – Map Coefficient C-1	47
Figure 6 – Map Coefficient C-2	48
Figure 7 – Drainage Area VS Percent of the 1 Percent TP 40 Rainfall	49
Figure 8 – Land Subsidence Schematic –Riverine Flooding.....	114
Figure 9 – Land Subsidence Schematic – Hurricane/Tidal Surge Flooding	116
Figure 10a – Transect Location Map – Clear Creek	128
Figure 10b – Transect Location Map – Galveston Bay	129
Figure 10c – Transect Location Map – Ship Channel.....	130
Figure 11 –Transect Schematic	131
Figure 12 – Floodway Schematic.....	136

TABLES

Table 1 – Scope of Study	8
Table 2 – Stream Name Changes	17
Table 3 – Summary of Discharges	50
Table 4 – Summary of Reservoir Elevations	96
Table 5 – Summary of Roughness Coefficients	98
Table 6 – Summary of Coastal Elevations	119
Table 7 – Transect Data	123
Table 8 – Floodway Data.....	See Volumes 2 and 3
Table 9 – Community Map History.....	138
Table 10 – Revised Summary of Discharges – Fifth Revision	147
Table 11 – Revised Summary of Roughness Coefficients – Fifth Revision.....	149
Table 12 – Letters of Map Revision – Fifth Revision	150
Table 13 – Revised Scope of Study – Fifth Revision.....	150
Table 14 – Revised Summary of Stillwater Elevations – Fifth Revision	151
Table 15 – Revised Summary of Discharges – Sixth Revision.....	153
Table 16 – Letters of Map Revision –Sixth Revision.....	154

TABLE OF CONTENTS (Cont'd)
TABLES (cont'd)

Table 17 – Letters of Map Revision – Eighth Revision.....	156
Table 18 – Revised Summary of Discharges – Eighth Revision	157
Table 19 – Revised Scope of Study – Ninth Revision.....	160
Table 20 – Revised Summary of Discharges – Ninth Revision.....	160
Table 21 – Revised Summary of Roughness Coefficients – Ninth Revision.....	163

VOLUME 2 – _____, 2018

Table 8 – Floodway Data (Watersheds A – I)

VOLUME 3 – JANUARY 6, 2017

Table 8 – Floodway Data (Watersheds J – W)

EXHIBITS

Exhibit 1 – Flood Profiles – Flood Profiles included in this report are shown in Volumes 4 – 8.
See the pages following for a complete listing.

Exhibit 2 – Flood Insurance Rate Map Index and Flood Insurance Rate Map

TABLE OF CONTENTS (Cont'd)
 Exhibit 1 – Flood Profiles
VOLUME 4 – _____, 2018

Clear Creek Watershed (A)

HCFCD <u>Designation</u>	<u>Stream Name</u>	<u>Panels</u>
A100-00-00	Clear Creek	Panels A01P--A10P*
A104-00-00	Taylor Bayou	Panels A11P--A13P**
A104-04-00	Tributary 3.10 to Taylor Bayou	Panel A14P**
A104-07-00	Tributary 3.93 to Taylor Bayou	Panel A15P**
A104-13-00	Tributary 3.36 to Taylor Bayou	Panel A16P**
A104-14-00	Taylor Bayou Diversion Channel	Panel A17P**
A107-00-00	Cow Bayou	Panels A18P--A19P**
A107-03-00	Unnamed Tributary to Cow Bayou	Panel A19P
A111-00-00	Tributary 10.08 to Clear Creek	Panels A20P--A22P
A118-00-00	Cedar Gully	Panel A23P
A119-00-00	Turkey Creek	Panels A24P--A25P
A119-02-00	Tributary 0.16 to Turkey Creek	Panel A26P
A119-05-00	Unnamed Tributary to Turkey Creek	Panels A27P--A28P
A119-07-00	Unnamed Tributary to Turkey Creek	Panel A29P
A119-07-02	Unnamed Tributary to A1 19-07-00	Panels A29P--A30P
A120-00-00	Halls Road Ditch	Panels A31P--A33P

Armand Bayou Watershed (B)

B100-00-00	Armand Bayou	Panels B01P--B03P*
B104-00-00	Horsepen Bayou	Panels B04P--B05P
B104-04-00	Tributary 4.51 to Horsepen Bayou	Panel B06P
B104-05-00	Tributary 5.44 to Horsepen Bayou	Panel B07P
B106-00-00	Big Island Slough	Panels B08P--B09P
B109-00-00	Spring Gully	Panel B10P
B109-03-00	B1 12-02-00 Interconnect	Panel B11P
B111-00-00	Tributary 9.39 to Armand Bayou	Panel B12P
B112-00-00	Willow Springs Bayou	Panels B13P--B14P
B112-02-00	Tributary 1.78 to Willow Springs Bayou	Panels B15P--B16P
B112-04-00	Tributary B to Willow Springs Bayou	Panel B 17P
B113-00-00	Tributary 10.46 to Armand Bayou	Panel B18P
B114-00-00	County "C", D.D. #5	Panels B19P--B20P
B114-01-00	Private "G", D.D. #5	Panel B21P
B114-02-00	Unnamed Tributary to B 114-00-00	Panel B22P
B115-00-00	Tributary 12.18 to Armand Bayou	Panel B23P
B115-01-00	Tributary 12.18 to Armand Bayou (continued)	Panel B23P
B204-04-00	Horsepen Bayou Diversion Channel	Panel B24P

*Some Panels Not Printed as Areas Superseded by 1- percent annual chance coastal flooding

**All Panels Not Printed as Areas Superseded by 1- percent annual chance coastal flooding

TABLE OF CONTENTS (Cont'd)

Exhibit 1 – Flood Profiles

VOLUME 4 – (cont'd)**Sims Bayou Watershed (C)**

HCFCD <u>Designation</u>	<u>Stream Name</u>	<u>Panels</u>
C100-00-00	Sims Bayou	Panels C01P--C05P
C102-00-00	Plum Creek	Panels C06P--C07P
C103-00-00	Pine Gully	Panels C08P--C09P
C106-00-00	Berry Bayou	Panels C10P--C12P
C106-01-00	Berry Creek	Panels C13P--C14P
C106-01-07	Unnamed Tributary to Berry Creek	Panel C14(a)P
C106-03-00	Tributary 2.00 to Berry Bayou	Panels C15P--C16P
C106-08-00	Tributary 3.31 to Berry Bayou	Panel C17P
C118-00-00	Salt Water Ditch	Panel C18P
C123-00-00	Tributary 10.77 to Sims Bayou	Panel C19P
C223-00-00	Tributary 10.77 to Sims Bayou (continued)	Panel C19(a)P
C127-00-00	Swengel Ditch	Panel C20P
C132-00-00	Tributary 13.83 to Sims Bayou	Panel C21P
C147-00-00	Tributary 20.25 to Sims Bayou	Panels C22P--C23P
C147-02-00	C147-02-00	Panel C23(a)P
C161-00-00	Tributary 17.82 to Sims Bayou	Panel C24P

Brays Bayou Watershed (D)

D100-00-00	Brays Bayou	Panels D01P--D07P
D109-00-00	Harris Gully	Panel D08P
D111-00-00	Poor Farm Ditch	Panels D09P--D10P
D112-00-00	Willow Waterhole Bayou	Panel D11P
D118-00-00	Keegans Bayou	Panels D12P--D13P
D120-00-00	Tributary 20.90 to Brays Bayou	Panels D14P--D15P
D122-00-00	Tributary 21.95 to Brays Bayou	Panels D16P--D17P
D124-00-00	Tributary 22.69 to Brays Bayou	Panel D18P
D126-00-00	Tributary 23.53 to Brays Bayou	Panels D19P--D20P
D129-00-00	Tributary 26.20 to Brays Bayou	Panels D21P--D22P
D132-00-00	Tributary 29.16 to Brays Bayou	Panel D23P
D133-00-00	Bintliff Ditch	Panel D24P
D139-00-00	Chimney Rock Diversion Channel	Panel D25P
D140-00-00	Fondren Diversion Channel	Panel D26P
D140-04-00	Fondren Diversion Channel (continued)	Panel D26P
D142-00-00	Tributary 20.86 to Brays Bayou	Panel D27P
D144-00-00	City Ditch	Panel D28P

TABLE OF CONTENTS (Cont'd)

Exhibit 1 – Flood Profiles
VOLUME 5 – JANUARY 6, 2017

White Oak Bayou Watershed (E)

HCFCD <u>Designation</u>	<u>Stream Name</u>	<u>Panels</u>
E100-00-00	White Oak Bayou	Panels E01P--E11P
E101-00-00	Little White Oak Bayou	Panels E12P--E13P
E115-00-00	Brickhouse Gully	Panels E14P--E16P
E115-04-00	Brickhouse Gully Tributary 1.61	Panel E17P
E116-00-000	Tributary 10.1 to White Oak Bayou	Panel E18P E116-
E117-00-00	Cole Creek	Panels E19P--E21P
E121-00-00	Vogel Creek	Panels E22P--E24P
E122-00-00	Unnamed Tributary to White Oak Bayou	Panels E25P--E26P
E124-00-00	White Oak Bayou Tributary 15.8	Panel E27P
E125-00-00	Rolling Fork	Panel E28P
E127-00-00	Tributary 19.05 to White Oak Bayou	Panel E29P
E135-00-00	Tributary 19.82 to White Oak Bayou	Panel E30P
E141-00-00	Beltway Channel	Panels E31P--E32P

Galveston Bay Watersheds (F)

F216-00-00	Little Cedar Bayou	Panels F01P – F021
F220-00-00	Pine Gully	Panel F03P
F220-03-00	Pine Gully (continued)	Panel F03P

San Jacinto River Watershed (G)

G100-00-00	San Jacinto River, Houston Ship Channel	Panels G01P
G100-00-00	Buffalo Bayou, Houston Ship Channel	Panels G02P--G04P
G103-00-00	San Jacinto River	Panels G05P--G08P*
G103-01-00	Unnamed Tributary to San Jacinto River	Panels G09P--G10P
G103-07-00	Unnamed Tributary to San Jacinto River	Panels G11P--G14P
G103-00-00	Lake Houston	Panels G15P--G17P
G103-00-00	West Fork San Jacinto River	Panels G18P--G21P
G103-33-00	Bens Branch	Panels G22P--G24P
G103-43-00	Jordan Gully	Panel G25P
G103-44-00	TxDOT Ditch #4	Panel G26P
G103-48-00	Blacks Branch	Panel G27P
G103-80-00	Lake Houston (continued)	Panels G17P & G28P
G103-80-00	East Fork San Jacinto River	Panels G29P--G34P
G103-80-03	Caney Creek	Panel G35P
G103-80-03.1	White Oak Creek	Panels G36P--G37P

*Some Panels Not Printed as Areas Superseded by 1-percent annual chance coastal flooding

TABLE OF CONTENTS (Cont'd)

Exhibit 1 – Flood Profiles

VOLUME 5 (cont'd)

San Jacinto River Watershed (G) (cont'd)

HCFCD <u>Designation</u>	<u>Stream Name</u>	<u>Panels</u>
G103-80-03.1A	Mills Branch	Panel G38P
G103-80-03.1B	Taylor Gully	Panels G39P--G40P
G104-00-00	Patrick Bayou	Panels G41P--G43P
G104-08-00	E. 13th St. Outfall Channel	Panels G44P--G45P
G105-00-00	Boggy Bayou	Panels G46P--G47P
G108-00-00	Glenmore Ditch	Panel G48P
G109-00-00	Tributary 6.77 to Buffalo Bayou	Panel G49P
G110-00-00	Cotton Patch Bayou	Panel G50P
G112-00-00	Panther Creek	Panel G51P

Hunting Bayou Watershed (H)

H100-00-00	Hunting Bayou	Panels H01P--H06P
H103-00-00	Wallisville Outfall	Panels H07P--H09P
H110-00-00	Tributary 12.70 to Hunting Bayou	Panel H10P
H112-00-00	Schramm Gully	Panel H11P
H118-00-00	Tributary 12.05 to Hunting Bayou	Panels H12P--H13P

Vince Bayou Watershed (I)

I100-00-00	Vince Bayou	Panels I01P--I03P
I101-00-00	Little Vince Bayou	Panels I04P--I05P

TABLE OF CONTENTS (Cont'd)

Exhibit 1 – Flood Profiles

VOLUME 6 – OCTOBER 16, 2013**Spring Creek Watershed (J)**

HCFCD <u>Designation</u>	<u>Stream Name</u>	<u>Panels</u>
J100-00-00	Spring Creek	Panels J01P--J29P
J109-00-00	Bender Lake	Panel J30P
J109-01-00	Continuation of Bender Lake	Panels J30P--J31P
J121-00-00	Tributary 21.08 to Spring Creek	Panel J32P
J131-00-00	Boggs Gully	Panels J33P--J36P
J131-01-00	Tributary 1.25 to Boggs Gully	Panel J37P
J158-00-00	Kickapoo Creek	Panels J38P--J40P

Cypress Creek Watershed (K)

K100-00-00	Cypress Creek	Panels K01P-K11P
K111-00-00	Turkey Creek	Panels K12P-K14P
K111-03-00	Tributary to Turkey Creek	Panel K15P
K112-00-00	Wild Cow Gulch	Panel K16P
K116-00-00	Schultz Gully	Panel K17P
K120-00-00	Lemm Gully	Panels K18P-K19P
K120-01-00	Senger Gully	Panels K20P-K21P
K120-03-00	Wunsche Gully	Panel K22P
K124-00-00	Seals Gully	Panels K23P-K24P
K124-02-00	Kothman Gully	Panels K25P-K26P
K131-00-00	Spring Gully	Panels K27P-K28P
K131-02-00	Theiss Gully	Panels K29P-K30P
K131-02-04	Tributary to Theiss Gully	Panel K30P
K131-03-00	Tributary 2.1 to Spring Gully	Panel K31P
K131-04-00	Tributary to Spring Gully	Panel K32P
K133-00-00	Dry Gully	Panels K33P-K34P
K140-00-00	Pillot Gully	Panels K35P-K36P
K142-00-00	Faulkey Gully	Panels K37P-K39P
K145-00-00	Dry Creek	Panels K40P-K41P
K150-00-00	Tributary 36.6 to Cypress Creek	Panels K42P-K43P
K150-01-00	Tributary 36.6-A to Cypress Creek	Panel K44P
K152-00-00	Tributary 37.1 to Cypress Creek	Panel K45P
K155-00-00	Tributary 40.7 to Cypress Creek	Panels K46P-K47P
K157-00-00	Tributary 42.7 to Cypress Creek	Panels K48P-K49P
K159-00-00	Channel A to Cypress Creek	Panels K50P-K51P
K159-01-00	Channel D to Channel A to Cypress Creek	Panel K52P
K160-00-00	Rock Hollow	Panels K53P-K55P
K160-01-00	Tributary 1.63 to Rock Hollow	Panels K56P-K58P

TABLE OF CONTENTS (Cont'd)

Exhibit 1 – Flood Profiles

VOLUME 6 (cont'd)

Cypress Creek Watershed (K) (cont'd)

HCFCD <u>Designation</u>	<u>Stream Name</u>	<u>Panels</u>
K166-00-00	Mound Creek	Panels K59P--K62P
K166-01-00	East Fork Mound Creek	Panels K63P--K64P
K166-02-00	Little Mound Creek	Panels K65P--K66P
K166-03-00	Tributary 7.62 to Mound Creek	Panel K67P
K185-00-00	Tributary 44.5 to Cypress Creek	Panel K68P
K172-00-00	Tributary 44.5 to Cypress Creek (continued)	Panels K68P--K70P

Little Cypress Creek Watershed (L)

L100-00-00	Little Cypress Creek	Panels L01P--L09P
L109-00-00	Tributary 9.36 to Little Cypress Creek	Panel L10P
L112-00-00	Tributary 10.99 to Little Cypress Creek	Panel L11P
L114-00-00	Tributary 13.92 to Little Cypress Creek	Panels L12P--L13P
L114-01-00	Tributary 0.12 to Tributary 13.92 to Little Cypress	Panels L14P--L16P

TABLE OF CONTENTS (Cont'd)

Exhibit 1 – Flood Profiles
VOLUME 7 – JANUARY 6, 2017

Willow Creek Watershed (M)

HCFCD <u>Designation</u>	<u>Stream Name</u>	<u>Panels</u>
M100-00-00	Willow Creek	Panels M01P--M09P
M101-00-00	Tributary 0.26 to Willow Creek	Panel M10P
M102-00-00	Tributary 1.77 to Willow Creek	Panel M11P
M104-00-00	Tributary 2.44 to Willow Creek	Panels M12P--M13P
M108-00-00	Hughes Gully	Panel M14P
M109-00-00	Cannon Gully	Panel M15P
M109-01-00	Metzler Creek	Panel M16P
M112-00-00	Tributary 6.52 to Willow Creek	Panels M17P--M18P
M116-00-00	Tributary 8.16 to Willow Creek	Panels M19P--M20P
M124-00-00	Tributary 13.50 to Willow Creek	Panels M21P--M23P
M129-00-00	Continuation of Willow Creek	Panel M09P

Carpenters Bayou Watershed (N)

N100-00-00	Carpenters Bayou	Panels N01P--N03P
N100-00-00	Sheldon Reservoir	N/A
N104-00-00	Tributary 3.33 to Carpenters Bayou	Panel N04P
N117-00-00	Tributary 11.715 to Carpenters Bayou	Panel N05P

Goose Creek Watershed (O)

O100-00-00	Goose Creek	Panels O01P--O03P
O105-00-00	East Fork Goose Creek	Panels O04P--O05P
O200-00-00	Spring Gully	Panels O06P--O07P
O208-00-00	Spring Gully Diversion Channel	Panel O08P

Greens Bayou Watersheds (P)

P100-00-00	Greens Bayou	Panels P01P--P 18P
P107-00-00	Big Gulch	Panels P19P--P21P
P109-00-00	Sulphur Gully	Panel P22P
P110-00-00	Spring Gully	Panels P23P--P24P
P114-00-00	Unnamed Tributary to Greens Bayou	Panel P25P
P118-00-00	Halls Bayou	Panels P26P--P34P
P118-14-00	Tributary 6.71 to Halls Bayou	Panel P35P
P118-23-00	Tributary 11.96 to Halls Bayou	Panel P36P
None	Unnamed Tributary to Halls Bayou	Panel P37P
P125-00-00	Tributary 14.27 to Greens Bayou	Panels P38P--P39P

TABLE OF CONTENTS (Cont'd)

Exhibit 1 – Flood Profiles

VOLUME 8 – JANUARY 6, 2017**Greens Bayou Watersheds (P) (cont'd)**

HCFCD <u>Designation</u>	<u>Stream Name</u>	<u>Panels</u>
P125-04-00	Tributary 14.27 to Greens Bayou (continued)	Panel P39P
P126-00-00	Tributary 14.82 to Greens Bayou	Panels P40P--P41P
P130-00-00	Garners Bayou	Panels P42P--P45P
P130-02-00	Williams Gully	Panels P46P--P47P
P130-02-02	Tributary 2.01 to Williams Gully	Panel P48P
P130-03-00	Tributary 3.19 to Garners Bayou	Panel P49P
P130-03-01	Tributary 0.55 to Tributary 3.19 to Garners Bayou	Panel P50P
P130-05-00	Reinhardt Bayou	Panels P51P--P52P
P133-00-00	Tributary 20.88 to Greens Bayou	Panel P53P
P138-00-00	Tributary 24.97 to Greens Bayou	Panels P54P--P55P
P140-00-00	Tributary 26.64 to Greens Bayou -- Hoods Bayou	Panel P56P
P140-04-00	Continuation of Tributary 26.64 to Greens Bayou	Panels P56P--P57P
P140-04-03	Continuation of Tributary 26.64 to Greens Bayou	Panels P57P--P58P
P145-00-00	North Fork Greens Bayou	Panels P59P--P60P
P145-03-00	Tributary 1.95 to North Fork Greens Bayou	Panels P61P--P62P
P146-00-00	Tributary 32.23 to Greens Bayou	Panel P63P
P147-00-00	Unnamed Tributary to Greens Bayou	Panels P64P--P65P
P148-00-00	Tributary 34.60 to Greens Bayou	Panel P66P
P155-00-00	Unnamed Tributary to Greens Bayou	Panels P67P--P68P
P156-00-00	Unnamed Tributary to Greens Bayou	Panel P69P

TABLE OF CONTENTS (Cont'd)

Exhibit 1 – Flood Profiles

VOLUME 8 – JANUARY 6, 2017**Cedar Bayou Watershed (O)**

HCFCD <u>Designation</u>	<u>Stream Name</u>	<u>Panels</u>
Q100-00-00	Cedar Bayou	Panels Q01P--Q09P*
Q101-00-00	Pine Gully	Panel Q10P**
Q112-00-00	Cary Bayou	Panels Q11P--Q12P
None	Horsepen Bayou (City of Baytown)	Panel Q13P(deleted)
Q114-00-00	McGee Gully	Panels Q14P--Q15P
Q122-00-00	Clawson Ditch	Panels Q16P--Q17P
Q128-00-00	Adlong Ditch	Panels Q18P--Q20P
Q130-00-00	Unnamed Tributary to Cedar Bayou	Panels Q21P--Q22P
Q200-00-00	Cedar Bayou Diversion Channel	Panel Q23P**

Jackson Bayou Watershed (R)

R100-00-00	Jackson Bayou	Panels R01P--R02P
R102-00-00	Gum Gully	Panels R03P--R04P
R102-03-00	Tributary 2.70 to Gum Gully	Panel R05P
R102-03-01	Tributary 2.70 to Gum Gully (continued)	Panel R05P
R102-13-00	Tributary 3.08 to Gum Gully	Panel R06P

Luce Bayou Watershed (S)

S100-00-00	Luce Bayou	Panels S01P--S04P
S110-00-00	Shook Gully	Panels S05P--S06P
S114-00-00	Mexican Gully	Panel S07P

Barker Reservoir Watershed (T)

T100-00-00	Upper Buffalo Bayou / Cane	Panel not printed
T100-00-00	Cane Island Branch	Panels T01P--T03P
T101-00-00	Mason Creek	Panels T04P--T06P
T101-03-00	Tributary 4.96 to Mason Creek	Panels T07P--T08P
T101-10-00	Unnamed Tributary to Mason Creek	Panel T06P
T103-00-00	Tributary 52.9 to Upper Buffalo Bayou / Cane	Panels T09P--T10P
T103-01-00	Tributary 2.17 to Tributary 52.9 to Upper Buffalo Bayou / Cane	Panel T11P

* Some Panels Not Printed as Areas Superseded by 1-percent annual chance coastal flooding

** All Panels Not Printed as Areas Superseded by 1-percent annual chance coastal flooding

TABLE OF CONTENTS (Cont'd)

Exhibit 1 – Flood Profiles

VOLUME 8 (cont'd)

Addicks Reservoir Watershed (U)

HCFCD <u>Designation</u>	<u>Stream Name</u>	<u>Panels</u>
U100-00-00	Langham Creek	Panels U01P--U06P
U101-00-00	South Mayde Creek	Panels U07P--U12P
U101-07-00	Tributary 9.4 to South Mayde Creek	Panels U14P--U15P
U101-22-00	Unnamed Tributary to South Mayde Creek	Panels U12P--U13P
U102-00-00	Bear Creek	Panels U16P--U20P
U102-01-00	Unnamed Tributary to Bear Creek	Panels U21P--U22P
U106-00-00	Horsepen Creek	Panels U23P--U25P
U120-00-00	Dinner Creek	Panels U26P--U27P
U200-00-00	Addicks Reservoir Diversion Channel	Panel U01P
U202-01-00	Bear Creek Diversion Channel	Panel U16P
W167-01-00	Tributary 3.9 to Turkey Creek	Panel U28P

Buffalo Bayou Watershed (W)

W100-00-00	Buffalo Bayou	Panels W01P--W14P
W140-00-00	Spring Branch	Panels W15P--W16P
W140-01-00	Briar Branch	Panels W17P--W18P
W141-00-00	Soldiers Creek	Panels W19P--W20P
W142-00-00	Bering Ditch	Panel W21P
W156-00-00	Rummel Creek	Panels W22P--W23P
W157-00-00	Unnamed Tributary to Buffalo Bayou	Panels W24P--W25P
W167-00-00	Turkey Creek	Panel W26P
W167-04-00	Continuation of Turkey Creek	Panels W26P--W29P
W167-01-00	Tributary 3.9 to Turkey Creek (See Addicks Watershed)	N/A
W170-00-00	Unnamed Tributary to Buffalo Bayou	Panels W30P--W32P
W190-00-00	Clodine Ditch	Panels W33P--W34P

TABLE OF CONTENTS (Cont'd)

Exhibit 2 – 0.2-Percent Annual Chance Wave Envelope Profiles*

*not all Coastal Transects have 0.2-Percent Annual Chance Wave Envelope Profile – for those transects that do not appear in the FIS there was no starting 0.2- Percent Annual Chance Stillwater Elevation

VOLUME 9 – JANUARY 6, 2017

Coastal Transects

Transects 1 – 41

Panels

Panels 01P -- 84P

VOLUME 10 – JANUARY 6, 2017

Coastal Transects

Transects 42 – 95

Panels

Panels 85P -- 168P

VOLUME 11 – JANUARY 6, 2017

Coastal Transects

Transects 96 – 166

Panels

Panels 169P -- 253P

VOLUME 12 – JANUARY 6, 2017

Coastal Transects

Transects 167 – 180

Panels

Panels 254P -- 279P

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION				
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE	
FEET (NAVD 88, 2001 Adjustment)									
C100-00-00 (Sims Bayou)									
A	344	603	12,273	3.5	17.62	11.5	11.9	0.4	
B	1,295	501	12,064	3.6	17.62	11.6	12.0	0.4	
C	2,326	287	6,055	7.1	17.62	11.6	12.0	0.4	
D	3,013	424	9,907	4.3	17.72	12.3	12.7	0.4	
E	4,154	201	5,251	8.2	17.72	12.4	12.6	0.2	
F	6,275	344	7,251	5.9	19.1	19.1	19.5	0.4	
G	8,458	481	11,243	3.6	19.8	19.8	20.6	0.8	
H	9,109	452	9,480	4.3	19.8	19.8	20.6	0.8	
I	10,198	440	9,134	4.5	20.0	20.0	20.8	0.8	
J	10,992	408	8,972	4.6	20.2	20.2	21.0	0.8	
K	11,812	420	9,612	4.3	20.3	20.3	21.1	0.8	
L	13,009	435	10,529	3.8	21.0	20.9	21.7	0.8	
M	13,755	320	6,966	5.8	20.9	20.9	21.7	0.8	
N	15,118	345	7,027	4.5	22.7	22.7	23.5	0.8	
O	16,016	451	9,210	3.4	23.0	23.0	23.8	0.8	
P	16,628	300	6,776	4.6	23.0	23.0	23.7	0.7	
Q	18,936	348	6,822	4.6	23.7	23.7	24.6	0.9	
R	19,586	331	6,786	4.6	23.8	23.8	24.7	0.9	
S	21,135	610	11,272	2.7	24.9	24.9	25.7	0.8	
T	22,650	663	12,163	2.5	25.4	25.4	26.3	0.9	
U	23,173	472	8,206	3.6	25.4	25.4	26.3	0.9	
V	24,163	292	6,316	4.7	25.5	25.5	26.4	0.9	
W	25,003	347	6,174	4.8	25.7	25.7	26.6	0.9	
X	25,775	347	5,565	5.4	26.0	26.0	26.8	0.8	
Y	27,115	325	6,608	4.5	26.6	26.6	27.3	0.7	
Z	28,349	361	6,307	4.6	28.0	28.0	28.7	0.7	

¹ Feet above confluence with G100-00-00 (Buffalo Bayou-Houston Ship Channel)

² Elevation computed using combined probability analysis

TABLE 8	FEDERAL EMERGENCY MANAGEMENT AGENCY HARRIS COUNTY, TX AND INCORPORATED AREAS	FLOODWAY DATA
		C100-00-00 (SIMS BAYOU)

LOCATION		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION				
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE	
C100-00-00 (Sims Bayou cont'd)									
AA	29,450	386	6,278	4.6	28.4	28.4	29.1	0.7	
AB	30,627	248	4,719	6.1	28.9	28.9	29.3	0.4	
AC	31,718	430	7,949	3.6	29.3	29.3	30.1	0.8	
AD	32,301	514	8,423	3.4	29.4	29.4	30.2	0.8	
AE	33,470	397	7,772	3.7	29.7	29.7	30.4	0.7	
AF	34,769	434	7,864	3.6	30.2	30.2	31.0	0.8	
AG	35,502	328	5,580	5.1	30.3	30.3	31.0	0.7	
AH	36,094	328	5,815	4.9	30.5	30.5	31.2	0.7	
AI	37,135	313	5,842	4.8	30.8	30.8	31.5	0.7	
AJ	37,723	313	5,763	4.9	31.0	31.0	31.7	0.7	
AK	38,702	318	6,811	4.1	31.4	31.4	32.0	0.6	
AL	39,959	276	5,502	5.1	32.9	32.9	33.5	0.6	
AM	41,247	280	5,303	5.3	33.3	33.3	33.8	0.5	
AN	41,835	280	4,979	5.6	33.4	33.4	34.0	0.6	
AO	43,139	345	5,918	4.7	34.1	34.1	34.6	0.5	
AP	43,932	325	6,069	3.9	34.4	34.4	34.9	0.5	
AQ	44,698	313	5,723	4.1	34.5	34.5	35.0	0.5	
AR	46,060	270	4,910	4.8	34.8	34.8	35.2	0.4	
AS	47,180	310	5,973	3.9	35.2	35.2	35.6	0.4	
AT	49,061	354	5,959	4.0	35.6	35.6	36.0	0.4	
AU	49,994	328	5,953	4.0	35.8	35.8	36.2	0.4	
AV	51,248	448	7,161	3.3	36.1	36.1	36.5	0.4	
AW	52,516	326	5,815	4.1	36.3	36.3	36.7	0.4	
AX	53,041	287	5,362	4.4	36.4	36.4	36.7	0.3	
AY	54,087	325	5,683	4.2	36.6	36.6	37.0	0.4	
AZ	54,708	342	5,399	4.4	36.8	36.8	37.1	0.3	

¹ Feet above confluence with G100-00-00 (Buffalo Bayou-Houston Ship Channel)

TABLE 8	FEDERAL EMERGENCY MANAGEMENT AGENCY HARRIS COUNTY, TX AND INCORPORATED AREAS	FLOODWAY DATA		
		C100-00-00 (SIMS BAYOU)		

LOCATION		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
C100-00-00 (Sims Bayou cont'd)								
BA	55,349	313	5,374	4.4	37.0	37.0	37.4	0.4
BB	56,751	323	5,363	4.4	37.4	37.4	37.7	0.3
BC	57,988	363	5,649	4.2	37.7	37.7	38.0	0.3
BD	59,897	328	5,228	3.9	38.3	38.3	38.7	0.4
BE	60,661	314	5,173	3.9	38.4	38.4	38.8	0.4
BF	61,408	341	5,344	3.8	38.6	38.6	39.0	0.4
BG	62,254	358	5,046	4.0	38.8	38.8	39.2	0.4
BH	62,855	347	5,114	3.8	38.9	38.9	39.3	0.4
BI	63,916	427	5,387	3.6	39.2	39.2	39.6	0.4
BJ	65,006	390	5,147	3.8	39.4	39.4	39.8	0.4
BK	65,635	366	5,018	3.9	39.6	39.6	39.9	0.3
BL	66,554	421	4,991	3.9	39.8	39.8	40.1	0.3
BM	67,634	434	5,274	3.7	40.1	40.1	40.4	0.3
BN	68,361	280	4,387	4.5	40.3	40.3	40.5	0.2
BO	69,257	456	5,362	3.6	40.8	40.8	41.1	0.3
BP	69,873	356	4,453	4.2	41.0	41.0	41.2	0.2
BQ	70,720	393	4,472	4.1	41.2	41.2	41.4	0.2
BR	71,576	354	4,407	4.2	41.5	41.5	41.7	0.2
BS	72,546	325	4,282	4.3	41.8	41.8	42.0	0.2
BT	73,541	401	4,238	4.4	42.1	42.1	42.3	0.2
BU	74,353	263	4,043	4.6	42.4	42.4	42.6	0.2
BV	75,450	283	3,930	4.7	42.7	42.7	42.9	0.2
BW	76,391	346	3,867	4.3	43.1	43.1	43.3	0.2
BX	77,380	299	4,046	4.1	43.4	43.4	43.6	0.2
BY	78,359	301	4,029	4.1	43.7	43.7	43.8	0.1
BZ	79,303	260	3,711	4.5	43.9	43.9	44.1	0.2

¹ Feet above confluence with G100-00-00 (Buffalo Bayou-Houston Ship Channel)

TABLE 8	FEDERAL EMERGENCY MANAGEMENT AGENCY HARRIS COUNTY, TX AND INCORPORATED AREAS	FLOODWAY DATA
		C100-00-00 (SIMS BAYOU)

LOCATION		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
C100-00-00 (Sims Bayou cont'd)								
CA	80,139	277	3,934	4.2	44.2	44.2	44.3	0.1
CB	81,854	288	3,787	4.3	45.0	45.0	45.1	0.1
CC	82,878	284	3,744	3.7	45.4	45.4	45.5	0.1
CD	83,805	308	3,460	4.0	45.6	45.6	45.7	0.1
CE	84,978	273	3,368	4.1	45.9	45.9	46.0	0.1
CF	85,550	249	3,274	4.0	46.1	46.1	46.2	0.1
CG	86,290	253	3,215	4.0	46.3	46.3	46.4	0.1
CH	87,169	243	3,209	4.1	46.5	46.5	46.6	0.1
CI	87,950	284	3,353	3.8	47.0	47.0	47.1	0.1
CJ	88,689	241	3,148	4.1	47.2	47.2	47.3	0.1
CK	89,609	235	3,089	4.0	47.4	47.4	47.5	0.1
CL	90,692	244	2,641	4.1	47.9	47.9	48.0	0.1
CM	91,577	201	2,505	4.3	48.2	48.2	48.2	0.0
CN	92,584	195	2,408	3.8	48.8	48.8	48.8	0.0
CO	93,313	207	2,293	4.0	49.0	49.0	49.0	0.0
CP	93,885	208	2,212	4.1	49.2	49.2	49.2	0.0
CQ	94,709	192	2,097	4.3	49.4	49.4	49.5	0.1
CR	95,243	190	2,055	2.3	49.8	49.8	49.9	0.1
CS	95,769	183	1,795	2.6	49.8	49.8	49.9	0.1
CT	96,341	183	1,706	2.8	49.9	49.9	50.0	0.1
CU	97,312	179	1,612	2.6	50.4	50.4	50.4	0.0
CV	98,113	176	1,486	2.8	50.5	50.5	50.6	0.1
CW	99,277	178	1,354	2.9	50.9	50.9	51.0	0.1
CX	100,990	173	1,164	2.7	51.5	51.5	51.5	0.0
CY	101,610	171	1,097	2.9	51.7	51.7	51.7	0.0
CZ	102,148	91	551	5.7	55.7	55.7	55.7	0.0

¹ Feet above confluence with G100-00-00 (Buffalo Bayou-Houston Ship Channel)

TABLE 8	FEDERAL EMERGENCY MANAGEMENT AGENCY HARRIS COUNTY, TX AND INCORPORATED AREAS	FLOODWAY DATA
		C100-00-00 (SIMS BAYOU)

LOCATION		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION				
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE	
C100-00-00 (Sims Bayou cont'd)									
DA	103,023	90	703	4.5	57.1	57.1	57.1	0.0	
DB	104,149	96	608	4.8	58.5	58.5	58.6	0.1	
DC	104,687	135	920	3.1	59.1	59.1	59.1	0.0	
DD	105,945	111	670	3.2	59.6	59.6	59.7	0.1	
DE	106,889	89	557	3.9	60.1	60.1	60.2	0.1	
DF	108,214	114	545	3.5	61.2	61.2	61.4	0.2	
DG	108,876	105	486	3.6	62.1	62.1	62.4	0.3	
DH	109,493	100	546	3.1	62.9	62.9	63.1	0.2	
DI	110,992	97	503	2.9	63.6	63.6	63.8	0.2	
DJ	111,590	96	465	2.9	64.2	64.2	64.3	0.1	
DK	112,387	87	442	2.9	64.7	64.7	64.8	0.1	
DL	113,414	129	444	2.7	65.4	65.4	65.4	0.1	

¹ Feet above confluence with G100-00-00 (Buffalo Bayou-Houston Ship Channel)

TABLE 8	FEDERAL EMERGENCY MANAGEMENT AGENCY HARRIS COUNTY, TX AND INCORPORATED AREAS	FLOODWAY DATA
		C100-00-00 (SIMS BAYOU)

LOCATION		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
C102-00-00 (Plum Creek)								
A	829	55	677	3.8	19.3 ²	6.4	7.4	1.0
B	1,502	113	847	2.8	19.3 ²	7.1	8.1	1.0
C	2,455	77	670	3.2	19.3 ²	8.2	8.9	0.7
D	3,152	203	1,600	1.3	19.3 ²	9.1	9.6	0.5
E	3,968	113	958	2.0	19.3 ²	9.6	10.1	0.5
F	4,847	130	891	2.1	19.3 ²	10.2	10.7	0.5
G	6,091	190	566	2.7	19.3 ²	11.0	11.1	0.1
H	6,714	156	512	3.0	19.3 ²	11.5	11.7	0.2
I	7,569	58	253	4.8	19.3 ²	13.0	13.2	0.2
J	9,684	87	293	4.2	19.3 ²	14.2	14.3	0.1

¹ Feet above confluence with C100-00-00 (Sims Bayou)

² Elevation computed with consideration of backwater effects from C100-00-00 (Sims Bayou)

TABLE 8	FEDERAL EMERGENCY MANAGEMENT AGENCY HARRIS COUNTY, TX AND INCORPORATED AREAS	FLOODWAY DATA
		C102-00-00 (PLUM CREEK)

LOCATION		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
C103-00-00 (Pine Gully)								
A	702	188	698	3.4	20.6 ²	9.5	10.5	1.0
B	1,640	88	490	2.7	20.6 ²	11.1	11.6	0.5
C	2,527	110	523	2.5	20.6 ²	12.1	12.4	0.3
D	3,313	134	500	2.6	20.6 ²	13.0	13.2	0.2
E	4,873	74	209	4.6	20.6 ²	15.9	15.9	0.0
F	5,300	53	210	4.6	20.6 ²	17.3	17.3	0.0
G	6,231	63	420	2.3	26.9	26.9	27.0	0.1
H	6,933	97	610	1.6	27.1	27.1	27.2	0.1
I	8,001	91	488	2.0	28.7	28.7	29.2	0.5
J	8,760	53	437	2.2	29.1	29.1	29.5	0.4
K	10,205	282	1,289	0.8	34.3	34.3	35.0	0.7
L	10,772	315	1,095	0.9	34.3	34.3	35.1	0.8
M	11,724	100	648	0.6	34.4	34.4	35.2	0.8
N	12,421	60	393	1.0	34.4	34.4	35.2	0.8
O	13,586	49	384	1.1	34.5	34.5	35.5	1.0

¹ Feet above confluence with C100-00-00 (Sims Bayou)

² Elevation computed with consideration of backwater effects from C100-00-00 (Sims Bayou)

TABLE 8	FEDERAL EMERGENCY MANAGEMENT AGENCY HARRIS COUNTY, TX AND INCORPORATED AREAS	FLOODWAY DATA
		C103-00-00 (PINE GULLY)

LOCATION		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
C106-00-00 (Berry Bayou)								
A	298	198	4,075	3.3	20.9 ²	18.3	19.3	1.0
B	2,097	310	3,979	2.8	20.9 ²	18.9	19.8	0.9
C	3,503	280	4,347	2.6	20.9 ²	19.2	20.1	0.9
D	4,596	330	4,482	2.5	20.9 ²	19.4	20.3	0.9
E	5,789	264	4,715	2.4	20.9 ²	20.0	20.7	0.7
F	6,770	215	3,147	3.6	20.9 ²	20.2	20.9	0.7
G	7,488	139	2,371	4.7	20.9	20.9	21.8	0.9
H	8,476	146	2,148	4.9	21.6	21.6	22.4	0.8
I	9,202	172	2,995	3.1	22.5	22.5	23.4	0.9
J	9,880	154	2,622	3.5	22.6	22.6	23.4	0.8
K	10,683	154	2,523	3.7	22.8	22.8	23.6	0.8
L	11,271	170	2,280	4.1	23.0	23.0	23.8	0.8
M	11,965	159	2,344	3.6	23.6	23.6	24.5	0.9
N	13,007	160	2,478	3.4	23.9	23.9	24.8	0.9
O	13,385	159	2,044	4.1	24.1	24.1	25.0	0.9
P	15,277	176	1,956	3.3	25.1	25.1	25.8	0.7
Q	15,961	109	1,322	4.8	25.3	25.3	26.0	0.7
R	17,170	104	1,085	5.0	26.5	26.5	27.0	0.5
S	18,228	138	1,590	3.1	27.0	27.0	27.7	0.7
T	19,029	85	1,040	4.2	27.4	27.4	28.1	0.7
U	19,790	96	951	4.6	27.4	27.4	28.1	0.7
V	20,616	100	923	4.2	27.9	27.9	28.5	0.6
W	21,919	99	542	3.6	29.4	29.4	30.0	0.6
X	23,292	95	393	5.0	29.8	29.8	30.5	0.7
Y	24,223	260	713	2.4	30.7	30.7	31.5	0.8

¹ Feet above confluence with C100-00-00 (Sims Bayou)

² Elevation computed with consideration of backwater effects from C100-00-00 (Sims Bayou)

TABLE 8	FEDERAL EMERGENCY MANAGEMENT AGENCY HARRIS COUNTY, TX AND INCORPORATED AREAS	FLOODWAY DATA
		C106-00-00 (BERRY BAYOU)

LOCATION		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
C106-00-00 (Berry Bayou cont'd)								
Z	25,286	253	550	3.1	30.7	30.7	31.5	0.8
AA	26,033	400	599	2.9	30.8	30.8	31.5	0.7
AB	27,000	406	750	1.9	31.1	31.1	31.8	0.7
AC	27,717	75	407	3.5	31.2	31.2	31.9	0.7
AD	28,294	520	853	1.5	33.7	33.7	33.8	0.1
AE	29,240	350	780	1.7	33.9	33.9	34.5	0.6

¹ Feet above confluence with C100-00-00 (Sims Bayou)

TABLE 8	FEDERAL EMERGENCY MANAGEMENT AGENCY HARRIS COUNTY, TX AND INCORPORATED AREAS	FLOODWAY DATA
		C106-00-00 (BERRY BAYOU)

LOCATION		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
FEET (NAVD 88, 2001 Adjustment)								
C106-01-00 (Berry Creek)								
A	884	41	385	8.1	21.1 ²	11.3	12.2	0.9
B	1,698	50	566	5.5	21.1 ²	15.1	16.0	0.9
C	2,880	191	700	3.9	21.1 ²	18.8	19.4	0.6
D	3,396	74	441	6.1	21.1 ²	20.5	20.8	0.3
E	4,149	156	736	3.7	23.1	23.1	23.4	0.3
F	4,817	170	1,057	2.6	24.1	24.1	24.2	0.1
G	5,559	59	485	5.6	24.9	24.9	25.0	0.1
H	6,255	70	484	5.6	26.8	26.8	27.1	0.3
I	7,024	80	674	4.0	28.6	28.6	28.8	0.2
J	7,718	80	707	3.8	29.6	29.6	29.8	0.2
K	8,318	113	952	2.8	30.4	30.4	30.6	0.2
L	8,841	113	813	3.2	30.6	30.6	30.8	0.2
M	9,741	134	1,000	2.5	31.6	31.6	31.8	0.2
N	10,031	59	373	6.8	31.6	31.6	31.8	0.2
O	10,717	80	420	5.9	33.1	33.1	33.4	0.3
P	11,481	568	4,470	0.5	34.2	34.2	34.7	0.5
Q	12,399	440	1,427	1.6	34.2	34.2	34.7	0.5
R	12,877	325	1,224	1.8	34.3	34.3	35.1	0.8
S	13,310	430	1,721	1.3	34.5	34.5	35.3	0.8
T	14,358	925	2,778	0.8	34.7	34.7	35.5	0.8
U	15,416	585	3,428	0.6	34.9	34.9	35.8	0.9
V	15,938	670	2,353	0.9	35.0	35.0	35.9	0.9
W	16,875	775	2,562	0.7	35.3	35.3	36.2	0.9
X	17,522	825	2,431	0.8	35.5	35.5	36.3	0.8
Y	19,005	262	561	3.3	36.4	36.4	37.3	0.9

¹ Feet above confluence with C106-00-00 (Berry Bayou)

² Elevation computed with consideration of backwater effects from C106-00-00 (Berry Bayou)

TABLE 8	FEDERAL EMERGENCY MANAGEMENT AGENCY HARRIS COUNTY, TX AND INCORPORATED AREAS	FLOODWAY DATA
		C106-01-00 (BERRY CREEK)

LOCATION		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
C106-01-00 (Berry Creek cont'd)								
Z	19,919	310	644	2.9	39.1	39.1	39.3	0.2
AA	20,941	310	927	2.0	40.5	40.5	41.0	0.5
AB	22,197	112	417	2.1	40.0	40.9	41.8	0.9
C106-01-07 (Unnamed Tributary To Berry Creek)								
AC	23,812	100	722	1.2	41.0	41.0	41.9	0.9
AD	24,877	76	543	1.6	41.0	41.0	41.9	0.9

¹ Feet above confluence with C106-00-00 (Berry Bayou)

² Elevation computed with consideration of backwater effects from C106-00-00 (Berry Bayou)

TABLE 8

FEDERAL EMERGENCY MANAGEMENT AGENCY
HARRIS COUNTY, TX
AND INCORPORATED AREAS

FLOODWAY DATA

**C106-01-00 (BERRY CREEK)
C106-01-07 (UNNAMED TRIBUTARY TO BERRY CREEK)**

LOCATION		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
C106-03-00 (Tributary 2.00 to Berry Bayou)								
A	1,049	63	231	9.7	24.7 ²	20.0	21.0	1.0
B	1,349	72	294	7.7	24.7 ²	22.8	22.8	0.0
C	2,354	62	378	5.4	27.0	27.0	27.0	0.0
D	2,769	51	391	4.9	27.9	27.9	27.9	0.0
E	3,317	57	302	6.4	27.9	27.9	27.9	0.0
F	4,360	75	358	4.5	28.7	28.7	28.7	0.0
G	4,552	60	329	4.9	28.7	28.7	28.7	0.0
H	5,275	71	265	6.1	29.9	29.9	29.9	0.0
I	5,760	545	813	2.0	31.0	31.0	31.3	0.3
J	6,249	900	2,348	0.6	32.2	32.2	33.0	0.8
K	7,228	1,320	3,285	0.4	32.2	32.2	33.2	1.0
L	7,724	1,410	2,912	0.5	32.3	32.3	33.3	1.0
M	8,309	1,189	1,921	0.7	32.5	32.5	33.5	1.0
N	9,252	1,075	1,600	0.8	32.9	32.9	33.8	0.9
O	9,689	890	1,846	0.7	33.1	33.1	34.1	1.0

¹ Feet above confluence with C106-00-00 (Berry Bayou)

² Elevation computed with consideration of backwater effects from C106-00-00 (Berry Bayou)

TABLE 8	FEDERAL EMERGENCY MANAGEMENT AGENCY HARRIS COUNTY, TX AND INCORPORATED AREAS	FLOODWAY DATA
		C106-03-00 (TRIBUTARY 2.00 TO BERRY BAYOU)

LOCATION		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
C106-08-00 (Tributary 3.31 to Berry Bayou)								
A	874	44	183	8.8	27.7 ²	23.7	24.7	1.0
B	1,854	44	162	10.3	27.7 ²	25.4	25.8	0.4
C	2,350	44	153	10.9	27.7 ²	26.2	26.4	0.2
D	2,876	44	146	11.5	27.7 ²	27.2	27.2	0.0
E	3,797	185	548	3.0	32.7	32.7	33.4	0.7
F	4,725	215	637	2.4	33.0	33.0	33.9	0.9
G	5,219	212	49	3.2	33.2	33.2	34.0	0.8
H	6,014	220	444	3.5	33.4	33.4	34.2	0.8

¹ Feet above confluence with C106-00-00 (Berry Bayou)

² Elevation computed with consideration of backwater effects from C106-00-00 (Berry Bayou)

TABLE 8	FEDERAL EMERGENCY MANAGEMENT AGENCY HARRIS COUNTY, TX AND INCORPORATED AREAS	FLOODWAY DATA
		C106-08-00 (TRIBUTARY 3.31 TO BERRY BAYOU)

LOCATION		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
C118-00-00 (Salt Water Ditch)								
A	864	76	430	7.1	34.1 ²	26.9	27.9	1.0
B	1,510	120	439	5.5	34.1 ²	29.0	29.5	0.5
C	2,081	56	317	7.6	34.1 ²	30.2	30.5	0.3
D	2,998	88	493	4.9	34.1 ²	33.0	33.1	0.1
E	3,847	97	452	5.3	34.5	34.5	34.5	0.0
F	4,343	60	377	5.3	38.1	38.1	38.1	0.0
G	5,037	53	407	4.9	39.4	39.4	39.6	0.2
H	5,551	53	449	4.4	39.9	39.9	40.3	0.4
I	6,144	53	467	4.3	40.5	40.5	41.1	0.6

¹ Feet above confluence with C106-00-00 (Sims Bayou)

² Elevation computed with consideration of backwater effects from C100-00-00 (Sims Bayou)

TABLE 8	FEDERAL EMERGENCY MANAGEMENT AGENCY HARRIS COUNTY, TX AND INCORPORATED AREAS	FLOODWAY DATA
		C118-00-00 (SALT WATER DITCH)

LOCATION		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY FEET (NAVD 88, 2001 Adjustment)	WITH FLOODWAY	INCREASE
C123-00-00 (Tributary 10.77 to Sims Bayou)								
A	328	92	406	3.6	35.2 ²	24.8	25.8	1.0
B	1,277	77	127	11.2	35.2 ²	27.3	27.3	0.0
C	2,009	77	287	4.3	35.2 ²	32.6	32.6	0.0
D	2,605	70	276	4.4	35.2 ²	33.9	33.9	0.0
E	2,964	70	262	4.7	35.2 ²	34.6	34.6	0.0
C223-00-00 (Tributary 10.77 to Sims Bayou Continued)								
F	3,994	82	429	2.2	36.7	36.7	36.7	0.0
G	4,544	78	392	2.4	36.9	36.9	36.9	0.0
H	5,366	83	376	2.5	37.2	37.2	37.2	0.0
I	6,361	93	450	2.1	37.7	37.7	37.7	0.0
J	7,044	93	465	2.1	37.9	37.9	37.9	0.0
K	7,570	93	507	1.4	39.7	39.7	39.7	0.0

¹ Feet above confluence with C106-00-00 (Sims Bayou)

² Elevation computed with consideration of backwater effects from C100-00-00 (Sims Bayou)

TABLE 8	FEDERAL EMERGENCY MANAGEMENT AGENCY HARRIS COUNTY, TX AND INCORPORATED AREAS	FLOODWAY DATA
		C123-00-00 (TRIBUTARY 10.77 TO SIMS BAYOU) C223-00-00 (TRIBUTARY 10.77 TO SIMS BAYOU CONTINUED)

LOCATION		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
C127-00-00 (Swengel Dicth)								
A	346	107	186	4.4	37.7 ²	35.2	35.2	0.0
B	1,604	62	208	3.4	37.7 ²	37.3	37.3	0.0
C	2,707	50	202	3.3	38.3	38.3	38.3	0.0
D	3,732	58	165	4.0	39.6	39.6	39.6	0.0
E	4,426	64	190	1.2	40.7	40.7	40.7	0.0
F	5,290	63	130	1.7	40.8	40.8	40.9	0.1
G	5,714	57	110	1.9	41.1	41.1	41.2	0.1
H	6,470	54	84	2.5	41.6	41.6	41.7	0.1

¹ Feet above confluence with C100-00-00 (Sims Bayou)

² Elevation computed with consideration of backwater effects from C100-00-00 (Sims Bayou)

TABLE 8	FEDERAL EMERGENCY MANAGEMEMNT AGENCY HARRIS COUNTY, TX AND INCORPORATED AREAS	FLOODWAY DATA
		C127-00-00 (SWENGEL DITCH)

LOCATION		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY FEET (NAVD 88, 2001 Adjustment)	WITH FLOODWAY	INCREASE
C132-00-00 (Tributary 13.83 to Sims Bayou)								
A	2,371	84	478	2.6	39.8	39.8	39.8	0.0
B	2,865	84	464	2.2	39.9	39.9	39.9	0.0
C	3,739	87	360	2.9	40.3	40.3	40.3	0.0
D	4,672	86	330	3.1	41.0	41.0	41.0	0.0
(C147-00-00 Tributary 20.25 to Sims Bayou)								
A	746	1,078	3,843	1.2	54.9	54.9	55.8	0.9
B	1,391	948	2,309	2.0	55.3	55.3	56.1	0.8
C	2,118	1,041	3,307	1.4	56.1	56.1	57.0	0.9
D	2,519	1,497	7,434	0.7	56.5	56.5	57.5	1.0
E	2,751	1,470	7,370	0.7	56.6	56.6	57.4	0.8
F	3,348	1,065	5,999	0.8	56.7	56.7	57.7	1.0
G	4,988	218	1,744	2.6	58.5	58.5	59.4	0.9
H	5,858	500	2,359	1.9	58.8	58.8	59.7	0.9
I	6,413	700	2,370	1.8	59.0	59.0	59.9	0.9
(C142-02-00)								
J	7,590	720	2,843	1.4	59.4	59.4	60.3	0.9
K	8,178	330	1,259	3.3	59.5	59.5	60.5	1.0
L	8,871	149	979	4.2	60.1	60.1	60.7	0.6
M ²	9,417	314	1104	0.9	60.4	60.4	65.4	0.1

¹ Feet above confluence with C100-00-00 (Sims Bayou)

² In Fort Bend County

TABLE 8	FEDERAL EMERGENCY MANAGEMENT AGENCY HARRIS COUNTY, TX AND INCORPORATED AREAS	FLOODWAY DATA
		C132-00-00 (TRIBUTARY 13.83 TO SIMS BAYOU) C147-00-00 (TRIBUTARY 20.25 TO SIMS BAYOU) C142-02-00

LOCATION		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
C161-00-00 (Tributary 17.82 to Sims Bayou)								
A	1,189	82	358	4.0	45.4 ²	43.9	44.9	1.0
B	1,945	76	331	4.2	45.4	45.4	45.9	0.5
C	2,744	84	390	3.5	46.7	46.7	46.9	0.2
D	3,345	103	463	3.0	48.7	48.7	48.8	0.1
E	4,300	85	436	3.0	49.4	49.4	49.4	0.0
F	4,816	85	491	2.4	49.7	49.7	49.8	0.1
G	5,432	75	423	2.8	50.0	50.0	50.1	0.1
H	6,250	79	456	2.2	50.4	50.4	50.5	0.1
I	7,254	79	521	2.0	50.7	50.7	50.8	0.1
J	7,805	79	434	2.3	50.9	50.9	51.0	0.1

¹ Feet above confluence with C100-00-00 (Sims Bayou)

² Elevation computed with consideration of backwater effects from C100-00-00 (Sims Bayou)

TABLE 8	FEDERAL EMERGENCY MANAGEMENT AGENCY HARRIS COUNTY, TX AND INCORPORATED AREAS	FLOODWAY DATA
		C161-00-00 (TRIBUTARY 17.82 TO SIMS BAYOU)